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(54) OXIDE SUPERCONDUCTING
DOUBLE-PANCAKE COIL

(57) Abstract:

PURPOSE: To lessen an oxide superconducting pancake coil in current loss by a method wherein the oxide superconducting pancake coils are electrically connected together through the intermediary of a bobbin which is large enough in conductive cross-sectional area and excellent in electrical conductivity.

CONSTITUTION: Tape wires 1 and 2 both of oxide superconductor compounded with metal base are wound on a tubular conductive bobbin 3 overlapping each other. The tape wires 1 and 2 are wound in opposite directions respectively. The tape wires 1 and 2 are electrically connected to the bobbin 3 by connections 4 and 5, a current is made to flow in the tape wire 1 from outside, pass through the tape wire 2 from the connection 5 via the connection 4 and the bobbin 3,

and flow out of the tape wire 2 from outside. By this setup, even if a tape-shaped fragile wire is used, superconducting coils which are small in current loss and easily connected together can be obtained.

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